

*SPECIFICATION AMENDMENTS*

Replace paragraph [0033] with:

[0033] Turning now to FIGS. 4-6, the relationship between diesel combustion pressure and ion current at various speeds and loads is shown. FIG. 4 shows the relationship of pressure 400 and ion current 402 at an engine speed of 1500 rpm and a load of 50 ft-lb. The start of combustion 404 and combustion duration 406 are also shown. FIG. 5 shows the relationship of pressure 500 and ion current 502 at an engine speed of 1500 rpm and a load of 150 ft-lb. The start of combustion 504 and combustion duration 506 are also shown. FIG. 6 shows the relationship of pressure 600 and ion current 602 at an engine speed of 2000 rpm and a load of 150 ft-lb. The start of combustion 604 and combustion duration 606 are also shown. FIG. 7 shows the relationship of pressure 700 and ion current 702 at an engine speed of 2500 rpm and a load of 150 ft-lb. The start of combustion 704 and combustion duration 706 are also shown. From these figures, it can be seen that the rise of the ion current is located proximate to or at the start of combustion and the width of the ionization signal (i.e., the "crank angle distance" between the rise of the ion current and the fall of ion current) approximately lines up with the combustion duration 406, 506, 606, 607 derived from the combustion pressure 400, 500, 600, 700.